



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

03170

RBT18547
Job Sheet 172913



003181

Part No: RBT18547

Job Qty: 2 ea

DAS
21
9-89

Part Name: Tail Rotor Gearbox Drain Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/22/18

Job Tracking No:

Due Date: 4/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBT18547 REV 4A IPP REV A 18.02.21 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea		4/14/18	0.00	0.00	Start Up Small Fab-4		MLC
100	Small Fab	2 pcs		4/16/18	0.00	0.40	Small Fab-9		MLC DAS
110	QC	2 pcs		4/16/18	0.00	0.00	QC5		38
130	Packaging	2 pcs		4/16/18	0.00	0.00	Packaging3-2		9-89
140	QC21-FG	2 Ea		4/16/18	0.00	0.00	QC21		MLC 18/05/17

Part Op 100 - 1- Cut tube (2044T47) as per DWG 2- Assemble as per DWG
Descriptions: 130 - Identify and Stock

DAS
21
9-89

MAY 17 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
90145A433	Dowel Pin 3/32"X3/16"	6 Ea (3 ea)	90-Start up Operation	
2044T47	Tube Ø1.09	.6600 ft (.33 ea)	100-Small Fab	5042368
2044T67	Cap Ø1.09	4 Ea (2 ea)	100-Small Fab	5016490
51495K116	COUPLING 1/2" NCKL PLTD BRASS PUSH TO CONNECT TUBE FITTING COUPLING	2 Ea (1 ea)	100-Small Fab	5045014
9263K642	O-Ring	2 Ea (1 ea)	100-Small Fab	5031221
K010-0608	Hose Ø1/2 OD x Ø3/8 ID x 12-1/2ft	12 ft (6 ea)	100-Small Fab	50096054
PAD210	Foam Ø1 X 1	.1300 sf (.065 ea)	100-Small Fab	5043014
RBT18547-1	Body	2 Ea (1 ea)	100-Small Fab	5021250
				5049196

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
	Dart Aerospace Ltd.	6	100	0
	1270 Aberdeen Street	1	36	0
	Hawkesbury, ON K6A 1K7	4	40	0
	CANADA	2	38	0
	TEL : 1 613 632-5200	2	17	0
	Email: sales@dartaero.com	12	192	0
	www.dartaerospace.com	0	15	0
		2	0	0

Container No: S070728



Part: RBT18547

Job No: 172913

Serial No/Batch: S070728

Revision: 4A

Inspector:

cations

Date: 05/11/18

Plex 2/22/18 3:18 PM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		Skid-tu Machin Thermoform Large		AGAINST DEPARTMENT/PROCESS ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐																																																																																															
Date :		Step #:		QTY :		Approval ☐																																																																																															
Description Work Order Deviation						Approved By _____ / Supervisor _____ Verification _____ QA Coordinator Approval _____																																																																																															
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Environment</td><td style="width:5%;">☐</td> <td style="width:15%;">No Re-verification</td><td style="width:5%;">☐</td> <td style="width:15%;">Pressure/Forced</td><td style="width:5%;">☐</td> <td style="width:15%;">Temp</td><td style="width:5%;">☐</td> </tr> <tr> <td>Design</td><td>☐</td> <td>Operator</td><td>☐</td> <td>Bending</td><td>☐</td> <td>Set-u</td><td>☐</td> </tr> <tr> <td>Doc/Data</td><td>☐</td> <td>Offset/Setup</td><td>☐</td> <td>Centre Not Concentric</td><td>☐</td> <td>BOM</td><td>☐</td> </tr> <tr> <td>Equip/Tooling</td><td>☐</td> <td>Supplier</td><td>☐</td> <td>Cracks</td><td>☐</td> <td>Brol</td><td>☐</td> </tr> <tr> <td>Handling/Pre</td><td>☐</td> <td>Training</td><td>☐</td> <td>Crimp/Kink/Ripple/Wave</td><td>☐</td> <td>Insr</td><td>☐</td> </tr> <tr> <td>Material</td><td>☐</td> <td>Use for Testing</td><td>☐</td> <td>Cuffs</td><td>☐</td> <td>Co</td><td>☐</td> </tr> <tr> <td>Internal Transport</td><td>☐</td> <td>Poor Information</td><td>☐</td> <td>Crushing</td><td>☐</td> <td>Co</td><td>☐</td> </tr> <tr> <td>Tribal Knowledge</td><td>☐</td> <td>Rushing</td><td>☐</td> <td>Heat Treat</td><td>☐</td> <td>Cl</td><td>☐</td> </tr> <tr> <td>LOA</td><td>☐</td> <td>Product Improvement</td><td>☐</td> <td>Wave/Twist in Tube</td><td>☐</td> <td>In</td><td>☐</td> </tr> <tr> <td>Substation</td><td>☐</td> <td>Process Improvement</td><td>☐</td> <td>Marks/Chatter</td><td>☐</td> <td>Drill Holes</td><td>☐</td> </tr> <tr> <td>Past Expiry Date</td><td>☐</td> <td>Manufacturing Process</td><td>☐</td> <td colspan="4" rowspan="2">OTHER :</td> </tr> <tr> <td>Misidentified</td><td>☐</td> <td>Past Due</td><td>☐</td> </tr> </table>						Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temp	☐	Design	☐	Operator	☐	Bending	☐	Set-u	☐	Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM	☐	Equip/Tooling	☐	Supplier	☐	Cracks	☐	Brol	☐	Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Insr	☐	Material	☐	Use for Testing	☐	Cuffs	☐	Co	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Co	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cl	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	In	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Past Expiry Date	☐	Manufacturing Process	☐	OTHER :				Misidentified	☐	Past Due	☐	sitioned Wrong outside Dimensions ver/Under tolerance Part Incorrect Part Lost/Missing Part Moved Drawing Finish Misread Turning Sequence			
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Date: 05/14/18
 Inspector: _____
 Revision: 4A
 Serial No/ Batch: S070908
 Job No: 172913
 Part: RB18547
 Container No: S070908
 DART Aerospace Ltd.
 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 CANADA
 TEL: 1 813 632-5200
 Email: sales@dartaero.com
 www.dartaerospace.com

Specifications could not be found.

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

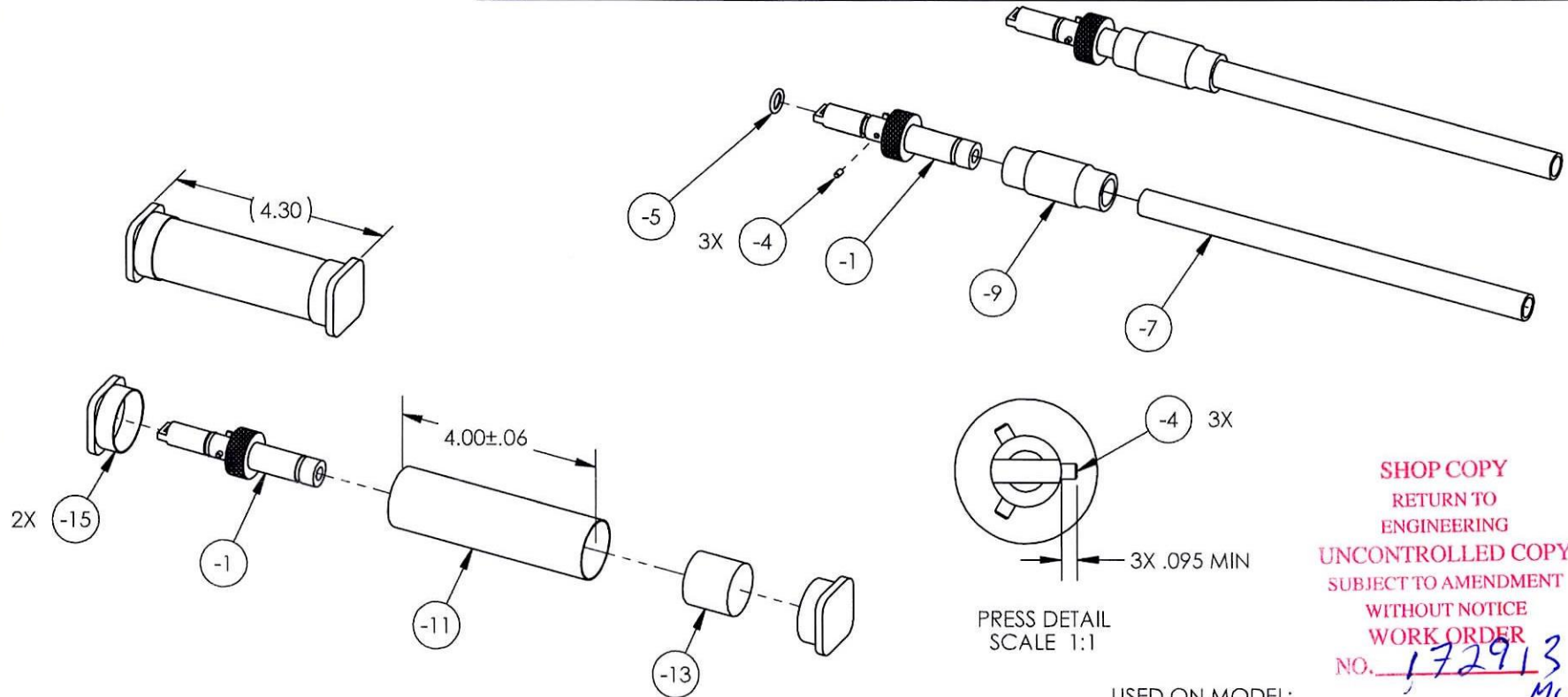
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
☐ OTHER : _____					

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGED P/N FROM DB3703-30	4/21/2006	COLE	APPROVED
2	IMPLEMENTED NEW DWG FORMAT. DELETED -3 FERRAL & TWO OF -1 HOSE RIBS. REDUCED FROM TWO PAGES TO ONE. ADDED ASSY DRAWING.	5/19/2008	WP	DW
3	CH'D CENTER HOLE FROM $\varnothing .225$ TO $\varnothing .250$, CH'D .065 DIM TO .070 ON -1 PER GE. ADDED HEAT SHRINK TO BOM & LABEL NOTE ON ASSY.	2/10/2010	RJC	RW
4	MODIFIED -1 TO WORK WITH COUPLING, ADDED COUPLING, DELETED HOSE CLAMP AND HEAT SHRINK TUBE. ADDED -11, -13, -15, EXPLODED VIEW AND UPDATED BOM.	8/1/2012	JAG	
4A	-11 CH'D DIM WAS 4.10 IS 4.00. -13 CH'D MATERIAL TO NEW PIG CORP. #PAD210.	2/5/2014	DPD	RW



SHOP COPY
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 172913

USED ON MODEL:
BELL 205-212, B3703 CHIP DETECTOR

ML5
18-02-02

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	BODY	6061	$\varnothing 7/8$ X 3-3/8	2
		B/O	-4	3	DOWEL PIN	S.S.	$\varnothing 3/32$ X 3/16 MCMaster-CARR #90145A433	1
		B/O	-5	1	O-RING	VITON	2-011N70 OR MCMaster-CARR #9263K642	1
		B/O	-7	1	HOSE	VINYL	$\varnothing 1/2$ O.D. x $\varnothing 3/8$ I.D. x 6ft KURI-TECH #K010-0608	1
		B/O	-9	1	COUPLING	NICKEL-PLATED BRASS	$\varnothing 1/2$ MCMaster-CARR #51495K116	1
		B/O	-11	1	TUBE	POLYETHYLENE	$\varnothing 1.09$ MCMaster-CARR #2044T47	1
		B/O	-13	1	FOAM	POLYESTER/POLYURETHANE	$\varnothing 1$ X 1 NEW PIG CORP. #PAD210	1
		B/O	-15	2	CAP	VINYL	$\varnothing 1.09$ MCMaster-CARR #2044T67	1

RED BARN MACHINE	
TITLE T/R GEAR BOX DRAIN TOOL	
DWG NO. RBT18547	REV 4A
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1 1. BREAK ALL SHARP EDGES .015 x 45° 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: COLE APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL SEE NOTE	
SCALE 1:3	DATE 2/5/2003
SHEET 1 OF 2	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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